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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/893,394	06/29/2001	Katsuto Koyama	109806	6005
25944	7590	08/20/2004	EXAMINER	
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			MAKI, STEVEN D	
			ART UNIT	PAPER NUMBER
			1733	
DATE MAILED: 08/20/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/893,394

Applicant(s)

KOYAMA ET AL.

Examiner

Steven D. Maki

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 7-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 7-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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- 1) The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 2) Claims 1-2 and 7-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, the step of winding an uncured tread rubber, made from low electrically conductive rubber and "formed in two parts as an integral extrusion shaped body" is ambiguous since the limitation of the uncured tread rubber being "two parts" is inconsistent with the limitation of the uncured tread rubber being "an integral extrusion shaped body". Is each part an integral extrusion shaped body? Alternatively, are the two parts joined so as to define an integral extrusion shaped body? In short, it is unclear if two parts or one body is being wound.

- 3) The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

- 4) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5) **Claims 1-2 and 7-11 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Sergel et al (US 2001/0035255).**

Sergel et al discloses making a tire by rotating a partial tire, winding a first strip on the partial tire and winding a second strip on the partial tire (figure 1). Since the strips can be wound sequentially (paragraph 7), one strip is wound before or after the other strip. The strips are arranged on different areas in the inner or the radially outer zone (paragraph 7). At least two strips of material of different mixtures can be wound onto the partial tire in such a way that the surface of the finished tire coming into contact with the roadway has alternating areas, which are formed from the respective individual mixtures of the strips of material (paragraph 14). The strip is extruded (paragraph 28). One strip comprises rubber and carbon black. This strip has a high electrical conductivity. The other strip comprises rubber and silica. This strip has a low electrical conductivity. At paragraph 11, Sergel et al teaches that the silica strip may be a "single thick strip". In the illustrated exemplary embodiment (figure 2), a carbon black strip 2b and a silica strip 2a are used to form the tread. The carbon black portion of the tread extends from an inner surface of the tread to a ground contacting surface of the tread. The three silica portions of the tread are at the ground contacting surface of the tread. The carbon black portion of the tread is in contact with the conductive layers of the tire such as the rubber coating of a bracing ply (belt reinforcement).

As to claims 1-2 and 7-11, the claimed method is anticipated by the method of Sergel et al. The claimed **uncured tread rubber** made from low electrical conductive

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rubber and formed in two parts as an integral extrusion shaped body corresponds to two of the silica reinforced rubber strips. Figure 3 shows three areas (three parts) defined by the silica mixture. The description of integral extrusion shaped body fails to distinguish over an extruded strip. The description of "in two parts" fails to exclude a third part. The claimed **uncured high electrically conductive ribbon** corresponds to the carbon black reinforced rubber strip. The claimed **tire material** containing a high electrically conductive rubber layer as at least an outermost layer corresponds to the conductive layer of the tire such as the rubber coating of a bracing ply.

In any event: it would have been obvious to wind *silica reinforced integral extrusion shaped bodies* before or after winding the carbon black reinforced strip on the conductive rubber layer of the tire so as to define "two parts" since (1) Sergel et al teaches winding the extruded strips sequentially to form alternating areas (alternating parts) and (2) Sergel et al suggests that the silica reinforced rubber strip may be in the form of a "single thick strip".

As to the dependent claims: As to claim 2, note that Sergel et al's teaching to use silica reinforced strip to form the silica reinforced portions. As to claim 7, note Sergel et al's teaching to establish an electrical path using a rubber coating of a bracing ply / belt which one of ordinary skill in the art would readily understand comprises cords. In any event: it would have been obvious to use a belt comprising cords in rubber as the conductive layer under the tread since Sergel et al teaches that the tire has a belt and a belt for a tire comprising cords in carbon black reinforced rubber is taken as well known

/ conventional per se in the tire art. As to claims 8-11, note Sergel et al's teaching to form a base cap tread.

6) Claims 1, 2 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sergel et al (US 2001/0035255) in view of Europe '452 (EP 658452).

Sergel et al is considered to anticipate claim 1. In any event: As to claims 1 and 2, It would have been obvious to one of ordinary skill in the art to wind the silica reinforced rubber, then the carbon black reinforced rubber and then the remaining portion of the silica reinforced rubber so as to define two parts since (1) Sergel et al teaches winding the carbon black reinforced strip and silica reinforced strip in different areas such that the resulting carbon black reinforced portion forms an electrical path for static discharge and (2) Europe '452 suggests arranging a carbon black reinforced portion (12) between two silica reinforced parts of a tread to establish an electrical path for static discharge (see figure 1).

As to claim 7, note Sergel et al's teaching to establish an electrical path using a rubber coating of a bracing ply / belt which one of ordinary skill in the art would readily understand comprises cords. In any event: it would have been obvious to use a belt comprising cords in rubber as the conductive layer under the tread since Sergel et al teaches that the tire has a belt and a belt for a tire comprising cords in carbon black reinforced rubber is taken as well known / conventional per se in the tire art.

7) Claims 1-2 and 7-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sergel et al (US 2001/0035255) as applied above and further in view of Gerresheim et al (US 5942069) and / or Europe '903 (EP 925903).

Sergel et al is considered to anticipate claim 1. In any event: As to claims 1-2, it would have been obvious to one of ordinary skill in the art to form a **base cap tread** by winding carbon black reinforced rubber strip to form the high electrically conductive base and an electrically conductive layer which forms the desired electrically conductive path and winding silica reinforced rubber strip to form two parts of a low electrically conductive cap since (1) Sergel et al suggests forming a **base cap tread** by winding carbon black reinforced rubber strip to form the high electrically conductive base and winding silica reinforced rubber strip to form a low electrically conductive cap, (2) Sergel et al suggests establishing an electrically conductive path from the tread surface to a conductive layer below the tread and (3) Gerresheim et al and / or Europe '903 suggest forming an electrical path between two parts of a silica reinforced cap of a **base cap tread** using a carbon black reinforced conductive layer extending between the two parts. In Gerresheim et al, a conductive (carbon black reinforced) portion extends between two poorly conducting parts (silica reinforced parts) of a base cap tread. See figure 1. Gerresheim et al also teaches that conductive material may be provided at the sides of the tread. See figure 2 and figures 13-15. In Europe '903, the high conductive portion (carbon black reinforced portion) extends between two separate low conductive parts (silica reinforced parts) of a base cap tread. See figures 17-24. Gerresheim et al and Europe '903's teachings relating to arrangement of carbon black reinforced material and silica reinforced material for a tire tread are applicable to Sergel et al since all three of these references are in the same field of endeavor and are directed to the same

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problem of ensuring electrostatic discharge in a tread having both silica reinforced and carbon black reinforced portions.

As to claim 7, note Sergel et al's teaching to establish an electrical path using a rubber coating of a bracing ply / belt which one of ordinary skill in the art would readily understand comprises cords. In any event: it would have been obvious to use a belt comprising cords in rubber as the conductive layer under the tread since Sergel et al teaches that the tire has a belt and a belt for a tire comprising cords in carbon black reinforced rubber is taken as well known / conventional per se in the tire art.

As to claim 8, Sergel et al teaches forming a base cap tread.

As to claim 9, the limitation therein would have been obvious in view of (a) Sergel et al's teaching to form a conductive path by winding a carbon black reinforced strip and (b) Europe '903's suggestion to extend a carbon black reinforced strip through a base cap tread.

As to claim 10, the limitation therein would have been obvious in view of (a) Sergel et al's teaching to form a conductive path by winding a carbon black reinforced strip and (b) Gerresheim et al and/or Europe 903's suggestion to arrange carbon black reinforced material on the side faces of the base cap tread.

As to claim 11, Sergel et al suggests winding carbon black reinforced strip to form the base.

Remarks

8) Applicant's arguments filed 6-1-04 have been fully considered but they are not persuasive.

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Applicant argues that the applied prior art does not disclose winding an uncured tread rubber, made from low electrically conductive rubber and formed in two parts as an integral extrusion shaped body. The examiner disagrees. First: Sergel et al teaches winding silica reinforced extruded strips. Since the strip is extruded, the strip is an integral extrusion shaped body. Since the strip comprises silica reinforced rubber, it is made from low electrically conductive rubber. These strips are wound to form three silica reinforced parts. See figure 2. The claimed two parts read on two of the three silica reinforced parts shown in figure 1. Second: The use of two silica reinforced parts in a tread is known as shown by Europe '452, Gerresheim et al or Europe '903. Sergel et al, also directed to the problem of establishing an electrically conductive path through a low conductive silica reinforced tread rubber, suggests forming such parts by winding silica reinforced strips. In other words, Sergel et al discloses the base teaching of forming silica reinforced portion(s) and carbon black reinforced portion(s) of a tread by winding different strips and the secondary art (Europe '452, Gerresheim et al and Europe '903) teach desirable arrangements of such portions including the use of two parts as claimed.

9) No claim is allowed.

10) Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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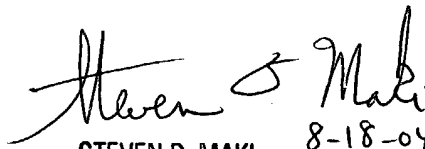
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven D. Maki whose telephone number is (571) 272-1221. The examiner can normally be reached on Mon. - Fri. 7:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on (571) 272-1156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Steven D. Maki
August 18, 2004


STEVEN D. MAKI
PRIMARY EXAMINER
~~GROUP 1300~~
Av 1733
8-18-04